

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Original) A method comprising:

capturing polypeptides from a sample, wherein the polypeptides
comprise target antigen and at least one modified form of target antigen; and

specifically measuring captured target antigen.
2. (Original) The method of claim 1 wherein the polypeptides are
captured with an antibody.
3. (Original) The method of claim 1 wherein the polypeptides are
captured with a chromatographic sorbent.
4. (Original) The method of claim 1 further comprising specifically
measuring at least one modified form of target antigen.
5. (Original) The method of claim 1 further comprising capturing and
measuring a polypeptide interactor of the target antigen.
6. (Original) The method of claim 1 wherein the captured polypeptides
are measured by mass spectrometry.
7. (Original) The method of claim 1 wherein the captured polypeptides
are measured by affinity mass spectrometry.
8. (Original) The method of claim 1 wherein the polypeptides are
measured by SELDI.
9. (Original) The method of claim 1 wherein the sample is a subject
sample and the method further comprises:
 - (c) correlating the detected target antigen with a clinical parameter
in the subject.

10. (Original) The method of claim 9 wherein the clinical parameter is presence or absence of a disease associated with the target antigen.

11. (Original) A method comprising:

capturing at least one modified form of the target antigen polypeptide from a sample; and

specifically measuring the at least one captured modified form of the target antigen polypeptide.

12-19. (Canceled)

20. (Original) A method comprising:

providing a learning set comprising a plurality of data objects representing subjects, wherein each data object comprises data representing a specific measurement of target antigen from a subject sample and a clinical parameter of the subject; and

determining a correlation between specific measurement of target antigen and the clinical parameters.

21-23. (Canceled)

24. (Original) A method comprising:

providing a learning set comprising a plurality of data objects representing subjects, wherein the subjects are classified into a plurality of different clinical parameters and wherein each data object comprises data representing specific measurement of a plurality of polypeptides from a subject sample wherein the polypeptides are selected from target antigen and at least one modified form of target antigen; and

training a learning algorithm with the learning set, thereby generating a classification model, wherein the classification model classifies a data object according to clinical parameter.

25-34. (Canceled)

35. (Original) A method for qualifying an immunoassay calibrator for an target antigen immunoassay comprising:

providing an immunoassay calibrator for an target antigen immunoassay, wherein the calibrator comprises a designated concentration of target antigen;

capturing polypeptides from the calibrator with an anti-target antigen antibody; and

specifically measuring an amount of at least one polypeptide selected from target antigen and modified form of the target antigen captured by the antibody, whereby the measured amount provides an indication of the quality of the immunoassay calibrator.

36-42. (Canceled)

43. (Original) A method comprising measuring modified forms of an anti-target antigen antibody in an antibody reagent for a target antigen immunoassay.

44-47. (Canceled)

48. (Original) A method for discovering polypeptides that interact with target antigen comprising:

capturing target antigen from a sample with a biospecific capture reagent;

removing molecules that are not bound to the biospecific capture reagent or the target antigen; and

measuring molecules bound to the captured target antigen.

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49-50. (Canceled)